

SPARK GAP

Vol. 34, Issue 6 -7 June - July 2017 *MARC - Serving Central Indiana Communities for thirty-four years*

On Our MARC:

I would like to thank all those that participated in the White River Township Fire Departments annual Strawberry Festival. We had over 15 MARC members and others on hand to show support. While we were talking with people that stopped by to ask questions, we had Ron, Noel, Chris, Steve and Jack on the radios making contacts with other HAMs. Everyone seemed to be enjoying the day. The weather couldn't have been better. Things went smoothly with setup. Even the firefighters hosting the snow cone stand made a comment to a few of us that setup went smoother than last year. Again thank you for all the hard work. I also want to thank Steve Ellis for bringing all of his antenna support equipment to get the various wire antennae up and on the air.

Next on our agenda was Field Day. This was the first Field Day for our new radio room. Set up ran smoothly with radios, antennae and computers working perfectly. We were ready to get on the air at the 2:00pm start time. We had Steve, Dave, Chris and Ron on the radios. Jack was working the packet station and trying to contact the elusive International Space Station. Wilson was the chef for the day.

We had 33 people stop by including Stephanie Sichting, Emergency Management Director for Johnson County. About 10pm we had a visit from the Franklin Police Department. They were just checking on the activities in the building. About 10pm we had an operator change. Thank you Mike, Noel and John for coming down and taking the night shift.

Sunday was day two and we had Kevin, Chris, Dave, Steve, Ron, Wilson and Tim back for more radio contacts. At the end of the event we had about 200 contacts for the 24 hour period. Again, thanks to all those that came out and helped.

Our next events will be Heartnut and the Greenwood Band Contest. More info will be passed along as we get it. Bob LaGrange will be asking for participants during the Sunday evening net. Keep listening!

The dinner social for June was held at Jockamo's Pizza. 16 people attended. As always much fun was had by all. But we broke camp a little early as very dark clouds were rolling in quickly.

The July dinner social will be held at Small Town Pizza in Franklin on Thursday, July 13. This is a new place for the club and I hope the pizza is as good as people say it is. Address is: 1940 Northwood Plaza. (The old Kroger strip mall on North Morton St.)

I hope everyone had a nice and safe 4th of July holiday.

See you Saturday. Coffee will be on.

Jacki - KI6QOG
President



Birthday for the month of June:
WA9VBG-Sam Carter
W8ISH-Jack Parker
K9OMT-Michael Turner

Birthday for the month of July:
KB9RBB-Tom Achors
KD9FPO-John Dickerson
KM6CRL-Bill Jackson

June 2017 Strawberry Fest

Three tents, several tables and chairs plus two forty foot masts were all set up in minutes to establish Camp Strawberry June 10th. This was the 25th MARC Amateur Radio demonstration supporting White River Township Fire Department Strawberry Festival. The festival is held at Sugar Grove Elementary school on west Smith Valley Road.

Steve Ellis-AF9SE brought his twin towers and an off center feed HF antenna. It takes a crew of eight people and a little patience to get this antenna array set up. What seemed like chaos to us registered well with on looking firefighters. One even commented, "That seemed to go much better than last year." Club President, Jacki, KI6QOG, insisted we erect the masts before anything else was put in place. That helped streamline the mast erection project.

Steve Carmean-K9DY was quick to set up his HF radio while Jack Parker-W8ISH assembled a portable VHF for later use. Ron Schuetz-K9THR, Steve-K9DY and Jack-W8ISH all brought their HF radios and ground mounted HF vertical antennas in case we needed more. If you didn't know better it looked and sounded like a rehearsal for Field Day.

Jacki Frederick-KI6QOG took care of hanging club banners and setting up a PR table. That area of the tent city was a busy place all day with lots of people showing interest in ham radio. We may have snagged a couple of new members who recently got their license but have not yet joined the club. Their visit prompted a lot of talk about buying your first radio and on how to program and operate their first purchase. Jack gave several demonstrations on digital modes like APRS and PSK31. Noel Mortier, W9NMM, parked his jeep next to the tents and made WIRES digital contacts throughout the day.

Cooler temps and gusty winds helped make it a pleasant day to hang out and talk ham radio under the tents. At last count over a dozen club members stopped by to chat and feast on the strawberry shortcake and ice cream.

Thanks to everyone who participated in the day long event.

-Jack W8ISH

Pictures from the WRTFD Strawberry Fest:



Chris talks HAM Radio



Jack searches for satellites



No Code Steve & Dave



MARC Picture Board



Fun group



Jack, Steve and Ron work DX



Chris & Noel work WIRES



Wilson & Steve put up the antenna

How to Copy CW in Your Head

By Dan Romanchik, KB6NU

The second most common question that I get about CW is, “How do I learn to copy in my head?” When I get this question, I give, what to some, is a very unsatisfying answer. One day, I just went cold turkey. I put down the pencil and paper and never copied letter-by-letter ever again.

Carlo Consoli, IK0YGI, author of *Zen and the Art of Radiotelegraphy* (http://www.qsl.net/ik0ygi/enu/ZART_r20101008m.pdf), says that what operators need to do is to program themselves to copy in their heads. He counsels operators to practice relaxation and visualization exercises. Visualize yourself as a high-speed operator, and maybe one day you will be one.

This approach seems to have worked for Consoli. He is a member of the Very High Speed Club (VHSC), First Class Operator’s Club (FOC), and has been clocked at copying over 70 wpm. I’m not sure that this is really going to work for everyone, though.

Another approach is touted by Carl, N7AGK. On his website, Carl writes, “I have created a program to assist you in learning to copy Morse code in your head. Everything you need will be contained on a single USB flashdrive that I will provide to you. In the program there are audio Morse code presentations followed by a visual display. The visual display shows the information in large print and upper case letters. The visual display verifies that you have received the Morse code correctly.” Carl’s program costs \$20 and is available from n7agk.com.

Zeb, HB9FXW, has created a free web application called Seiuchy (<http://www.kb6nu.com/let-walrus-help-copy-head/>) to help people learn head copying. Seiuchy, which Zeb says is Japanese for walrus, simulates on-air contacts. The trick to using this app is that instead of copying exactly what’s sent, you only copy the most important bit of information. The idea is that if you train yourself to do this, then you can concentrate on what’s important rather than getting bogged down in copying what’s not important.

A different take on head copy was sent in by one of my blog readers, Bill, W3MSH. He wrote, “I was a CW op for many years and discovered something fascinating. I first began to hear “dots and dashes”, then letters, words, sentences and at 35+ wpm, thoughts in my head.”

I think Bill may have hit the nail on the head with this comment. I like the idea that copying code in your head is more akin to generating thoughts than it is to copying individual characters or words. Everybody talks about how getting faster is about moving from copying individual characters to copying words to copying entire sentences. I’ve never thought of it that way, although I was at a loss as to how to describe how I do it. I think the idea that when copying in your head, the code creates thoughts directly is a beautiful way to put it.

Isn’t that what’s happening when you talk to someone? When someone talks to me, I don’t consciously parse the sentences and then analyze them to see what was just said. It’s more of an unconscious process. The sounds being uttered are creating ideas in my head.

Shouldn’t we approach head copy in the same way? Instead of thinking about head copy as the process of writing down the characters on an internal blackboard to be read later, it should be about translating the sound of the Morse Code directly into concepts. The sounds “dah di dit...dah dah dah...dah dah dit,” should conjure up the image of a poodle or a pitbull, not the letters “D O G.”

How that translates into a program or a method for learning to copy the code in one’s head is another matter. It might be worth thinking about, though.

Dan Romanchik, KB6NU, is the author of *The CW Geek’s Guide to Having Fun with Morse Code* and the *No Nonsense* series of amateur radio study guides. When he’s not head copying on 30m, he blogs about amateur radio at KB6NU.Com

FD 2017

What promised to be a fun filled day of radio action slowly became more frustrating as members of the Mid-State Amateur Radio club tried and tried to snag a few contacts during Field Day 2017. . Operating from our new Emergency Operations Center as 4F (4-radios from EOC on shore power) MARC hams made an all out assault on the air waves in hopes of making this a banner year for contacts.

The morning set up included the construction and testing of the club's Buddipole. It was used for 40 meters. Ron Schuetz, K9THR used his multi-band vertical while Steve Carmean, K9DY offered up his Ten-Tec station to a couple of our seasoned CW operators. All stations had limited success making contacts on Saturday. By day two we found that the Yaesu 857, a menu driven radio, was set to zero power. Oops.

According to Tony Stokes, KU9V, many of the other central Indiana clubs were having little success in their operations. Tony is the Indiana Section Emergency Coordinator. He stopped by late Saturday afternoon to inspect the Johnson county operation. Stokes reported that all counties he had visited were feeling the effects of poor propagation.

After spending the night working the low bands, Mike, KC9WLR and Noel, W9NMM handed off to the Sunday morning crew to keep the contacts coming.

Here is the official results as submitted by Steve, K9DY.

Total QSO's CW 87 x 2 points each

Total QSO's Phone 196 x 1 point each

Points Total 370

Bonus Points 670

Grand Total Claimed Score 1,040

Our thanks to Wilson Low, KD9FBC for grilling the Saturday hotdogs. Jacki, KI6QOG and the club treasury provided lots of chips, cookies and other refreshments to keep the gang working. Our official sign in log showed 28 club members and four guests for the weekend. That is an outstanding turnout for Field Day 2017.

-W8ISH



Banner hanging by Chris and Bill



Chris Rose gets the computer ready to go



Chris KQ9Y works 40M



Ron and Jack operate



Jacob and Dave getting ready for work



Johnson Co. EMA Director stops by



Steve, Jack and Steve Brown put an antenna



John, Sam and Steve CW station



Sam and John, CW tuning



Wilson cooks the hot dogs



A break from activity



Jack gets ready to work ISS



Ron and Ken chatting

..... Pictures by Jack W8ISH and Mike K9OMT

Opprtunity for HAM Radio Service

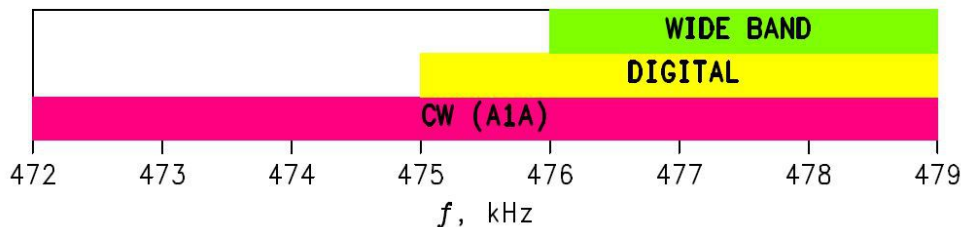
The fall is quickly approaching and it will soon be time for the Greenwood High School Marching Band Invitational. MARC members/friends and ARES/RACES members will be needed for this event that will be held on Saturday September 23rd at Greenwood High School, Smith Valley Rd. Greenwood. This is an all day event so many HAMS are need to work. More information will be given as this event gets closer. A sign up sheet will be available at the July MARC Monthly meeting.

The Greater Greenwood Community Band is hosting a Community Band Festival at the Ampatheater in Greenwood on Saturday August 26th. We have been asked to help with directing cars to the areas where parking will be permitted. Golf carts will be available to shuttle the band members and fans to the concert area. A sign up sheet for this event will be at our July MARC Monthly meeting. More info will soon be available on this event.

Band Plan Proposed for Eventual Amateur Radio Use of 472-479 kHz

ARRL 630-Meter Experiment Coordinator Fritz Raab, W1FR, and LF/VLF enthusiast John Langridge, KB5NJD, have proposed a possible band plan for the pending 472-479 kHz Amateur Radio band. Raab said that once US radio amateurs are granted access to 630 meters, he would move stations operating under the blanket WD2XSH FCC Experimental (Part 5) license to 461-472 kHz.

"This will clear the amateur frequencies, while allowing the experimenters to run unattended propagation beacons without using the limited bandwidth that will be available to amateurs," Raab explained in his spring 630-Meter Experiment Project Status quarterly report. "The new 630-meter band will have a very limited amount of spectrum (7 kHz)."



On March 28, the FCC adopted rules that will allow secondary Amateur Radio access to 472-479 kHz and to 135.7-137.8 kHz (2,200 meters), with minor conditions. The issue now holding up amateur access involves a requirement to notify the Utilities Telecoms Council (UTC) of proposed Amateur Radio operation on either new band. The FCC says the Office of Management and Budget (under the Paperwork Reduction Act) must first approve the information-collection requirements in §97.303(g)(2). Procedures to meet the requirements are said to be still under development by UTC, which says it wants to avoid Amateur Radio interference to power line communication (PLC) systems used to manage the electrical power grid. No such interference has been reported during the extensive experimental operation on 630 meters and on 2,200 meters.

According to Raab's quarterly report, he and Langridge prepared the 630-meter band plan that "based upon established patterns, separates different modes of operation, and harmonizes US amateur operations with those in Europe." The plan, which is still a proposal and has not been endorsed or adopted by ARRL, calls for using only narrowband modes -- with bandwidths of 150 Hz or less -- during nighttime operation. Under the plan, modes such as AM, SSB, and MCW would be discouraged after dark, except during special events. In the event a "wideband" mode were necessary, though, the signal should be confined to between 476 and 479 kHz.

Items to Buy, Sell or Trade:

I have a bunch of accessories for a Yaesu FT-857D and a couple of matching mobile screwdriver antennas. The radio was lost in the flood of 2008, but the parts are good, spare head, etc.

If interested in these items please contact Don West W9DEW by email : don-west @ att.net

Feature

RADIOSPORT RADIOSPORT RADIOSPORT RADIOSPORT

The Solar Eclipse QSO Party — Are You Ready?

From 1400 – 2200 UTC on August 21, 2017, hams will have the Sun's shadow in their sights.

Ward Silver, NØAX

The objective of the Solar Eclipse QSO Party (SEQP) is to flood the airwaves with contacts, all measured by the automated receiver networks of the Reverse Beacon Network, PSKReporter, and WSPRNet. When those observations are combined with the logs from individual stations, the result will be one of the largest ionospheric experiments ever performed. Here's how hams can have a starring role.

Start by taking the day off on Monday, August 21. The SEQP starts well before the eclipse begins on the western coast of Oregon. Begin making contacts right away to establish what the bands are like before the shadow starts digging a trench through the ionization "up there." As the penumbra starts cutting into the solar disc, operate on lots of bands (multioperator, anyone?) or focus on a favorite. Even if the higher bands aren't too lively, be sure to cast some CQs there, because the network receivers will be looking for signals, and you can get bonus points for being spotted. That's certainly a first!

Be sure you have the latest version of



your logging software and that it can accept the signal report and grid locator. Hopefully, your software will support the SEQP — check before the big day. In a pinch,

you may be able to use software that supports the ARRL VHF+ contests.

Bonus Points

The SEQP features a long list of bonuses similar to Field Day.

- Operate during totality at your location: 100 points
- Operate outdoors: 100 points
- Operate in a public place: 100 points
- Provide detailed station information: 50 points each for antenna information, HFTA terrain profile, ground conductivity, and station ERP/D on each band
- Operate a wide-band automated receiver at your station: 50 points
- One point for being spotted in a grid outside your own during each hour, and on each band and mode — CQ SEQP!

How to Participate

The Solar Eclipse QSO Party runs from 1400 – 2200 UTC on August 21. Exchange a signal report and your six-character grid locator on 160 – 6 meters (not on 60, 30, 17, and 12 meters, please). You can work stations again after 10 minutes to make as many "observations" (contacts) as possible. CW, RTTY, and PSK31 are preferred because automated receiving networks will record the contacts, but contacts on any digital mode and phone are fine too. See www.hamsci.org/seqp for scoring information, bonus points, operating guidelines, and complete rules.

What Happens Next

After we finish creating data, be sure to submit your log as described in the SEQP rules at www.hamsci.org/seqp. A group of researchers at Virginia Tech will process the data from each log and from all of the automated receiving networks. This will create the largest set of measurements from any amateur event ever.

The work begins in earnest once the data is in. The research community will go to work to validate their existing propagation models while looking for unexplained behaviors. As Isaac Asimov is reputed to have said, "The most exciting phrase to hear in science, the one that heralds new discoveries, is not 'Eureka' but 'That's funny...'"

Hams have been supporting scientific efforts since the earliest days of radio by doing things like keeping in touch with expeditions and making on-the-air measurements. The coming solar eclipse is the latest opportunity to participate in advancing our understanding of the world in which we live, and make a few contacts, too.

Eclipse Mob

The eclipse won't just affect the MF and HF bands, but the VLF bands, too. The Eclipse Mob group (www.hamsci.org/article/eclipsemob-low-frequency-effort) has a low-cost, easy-to-build receiver and smartphone app, so anyone can participate. No license is required, and observing can take place all year long.

"You'll Put Your Eye Out!"

Sure, it's amazing, but don't look at the Sun directly, or through any kind of magnifying device — whether during an eclipse or not. You can find out how to watch safely at www.skyandtelescope.com/astronomy-news/observing-news/view-the-sun-safely. Solar observing is great at any time — why not try to spot a sunspot?

Learn more!

www.arrl.org/what-is-ham-radio

UP – COMING ACTIVITIES AND HAMFESTS

**07/15/2017 – 0800 - MARC Monthly club meeting at the New Location,
Johnson County REMC 750 International Drive Franklin, IN 46131.**

08/26/2017 – Greenwood Community Band Festival, more information to follow.

08/19/2017- 0800 MARC Monthly meeting at the New Location.

Johnson County REMC 750 International Drive Franklin, IN 46131.

09/16/2017– 0800 - MARC Monthly club and annual picnic, more information to follow.

09/23/2017 – Greenwood Marching Band Invitational, Greenwood High School. More info to follow.

09/30/2017 – Statewide Simulated Emergency Test

Jamboree on the Air Marks 60 Years this Fall

"60 Years Connecting Scouts" is the theme for the Boy Scouts' 2017 Jamboree on the Air ([JOTA](#)), set for October 20-22. JOTA Coordinator Jim Wilson, K5ND, said the theme "recognizes the start of the event in 1957 and commemorates its growth in participation and in the expanding communication channels that are activated on the third weekend in October." The official JOTA patch will be available by July 19. The JOTA-JOTI (Jamboree on the Internet) patch is available now.

Wilson said JOTA's "communication channels" now include Amateur Radio on the air and via internet-based channels, as well as many other internet-based options, including social media, ScoutLink and IRC chat services, Skype, and more. "It also recognizes the goal of the event -- connecting Scouts so that they can engage in conversations with other Scouts across town and around the world," Wilson said. "This allows them to discover geographic and cultural differences and similarities. Plus, they are exposed to the technology that makes all this happen." The World JOTA-JOTI Team said it would announce "a number of weekend activities supporting the 2017 theme."

JOTA participation last October was up from 2015's numbers. According to the final JOTA report, 10,761 Scouts took part -- an increase of more than 50% from a year earlier -- and the number of stations filing reports, at 267, jumped by 28% from 2015 (the record was 271 in 2013). The number of Amateur Radio operators was up by 14% to 1,120, although the number of radios reported in use dropped by 25% to 631. Total JOTA 2016 contacts remained flat at 8,254. -- *Thanks to JOTA Coordinator Jim Wilson, K5ND*



MID-SATE AMATEUR RADIO CLUB

The Mid-State Amateur Radio Club meets the **THIRD SATURDAY** of each month
at the Johnson County REMC 750 International Drive Franklin, IN 46131.

See our website, www.midstatehams.org, for maps on how to get to our meeting.

Everyone is welcome; you do not have to be a *HAM* to attend our meetings or a member of the club.

WA9RDF Repeater:

146.835/
146.235 MHz
(151.4 Hz PL Tone)

Club Officers:

President: Jacki Frederick – KI6QOG
Vice President: Bruce Tisdale – K9ICP
Secretary: Rhonda Curtis – WS9H
Treasurer: Marlys Barr – KD9BHM
Repeater Trustee - Chris Frederick – KQ9Y

WA9RDF Repeater:

443.525/
448.525 MHz
(151.4 Hz PL Tone)

Weekly Net: Sunday evening 7:00 PM ARES/RACES members and ALL RADIO AMATEURS
146.835/146.235 MHz (151.4 Hz PL Tone)

The Official Newsletter of the Mid-State Amateur Radio Club

P.O. Box 836
Franklin, Indiana
46131

Spark Gap Editor: Robert LaGrange N9SIU

Please send your articles to my email: n9siu@yahoo.com no later than the 3rd of the month



Special thanks to Johnson County REMC for the use of their community room for meetings and testing.